Docket No.: <u>110275-2200 US2</u> <u>PATENT/**OFFICIAL**</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

:

Duske, Jr. et al.

Group Art Unit:

Serial No.

Group Aut Or

Filed:

herewith

: Examiner:

For:

MOBILE COMMUNICATIONS TERMINAL FOR SATELLITE

COMMUNICATIONS SYSTEM

PRELIMINARY AMENDMENT

Honorable Commissioner for Patents Washington, D. C. 20231

Sir:

This Preliminary Amendment is being filed concurrently with the above-referenced application. The following amendments and remarks are respectfully submitted.

IN THE SPECIFICATION

Please amend the specification as follows:

Please amend page 1 of the specification as indicated in the attached Appendix A (Marked-up Copy of Amended Specification). A clean copy of the amendments to the specification is attached as Appendix B (Replacement Page of Amended Specification).

IN THE CLAIMS

Please cancel claims 3-12 and 14-18, without prejudice or disclaimer.

Please add claims 24-28 as indicated in the attached Appendix C. A complete set of claims is attached on Appendix D.

REMARKS

This Preliminary Amendment is submitted to improve the form of the specification and claims as originally filed. The Related Applications Section has been corrected to more appropriately claim priority and continuation status. It is respectfully requested that this Preliminary Amendment be favorably examined and entered in the above-referenced application.

AUTHORIZATION

The Commissioner is hereby authorized to charge any additional fees which may be required for this Amendment, or credit any overpayment to deposit account no. 08-0219. In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to deposit account no. 08-0219.

Respectfully submitted, HALE AND DORR LLP

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Appendix A

(marked-up copy of amended specification)

Please amend page 1 of the specification as follows:

RELATED APPLICATIONS

This application is a Continuation Application of U.S Application No. 09/093,095, filed June 8, 1998, which in turn is a continuation of, and claims priority to, International Application number PCT/US96/19905, filed December 6, 1996, which in turn claims priority from U.S. Provisional Application No. 60/011,158, filed December 8, 1995, each of which are incorporated herein by reference.

[Related Applications

This application claims priority from U.S. provisional patent application serial number 60/011,158, filed on December 8, 1995, entitled "MOBILE COMMUNICATOR PROTOCOL AND FEATURES".]

Appendix B

(replacement page of amended specification)

RELATED APPLICATIONS

This application is a Continuation Application of U.S Application No. 09/093,095, filed June 8, 1998, which in turn is a continuation of, and claims priority to, International Application number PCT/US96/19905, filed December 6, 1996, which in turn claims priority from U.S. Provisional Application No. 60/011,158, filed December 8, 1995, each of which are incorporated herein by reference.

Appendix C

(new claims to be added)

24. In a communication system including a communication switching office for providing communication of a message with a mobile communication system, a central controller communicating with the mobile communication system via the communication switching office, a communication method comprising:

storing a plurality of message display forms in the mobile communication system, each message display form having a predetermined display format and a form identifier;

transmitting from the central controller to the mobile communication system a message carrying the message data and the form identifier of a selected one of the message display forms to the communication switching office; and

displaying the message received by the communication system using a selected one of the stored message display forms corresponding to the form identifier in the transmitted message.

25. In a mobile communication system including a communication switching office for providing communication of a messages with a mobile communication systems, a central controller communicating with the mobile communications system via the communication switching office, a communication method comprising:

storing network identifiers for the central controller and at least one of the mobile communication systems;

generating at a first of the mobile communication systems a user message comprising message data and one of the stored network identifiers;

outputting from the first mobile communication system a message carrying the one network identifier and the message data to the communication switching office;

transmitting the message to the communication switching office;

routing the message from the communication switching office to one of the central controller and a second of the mobile communication systems in accordance with the one network identifier.

- 26. In a mobile communication system including a communication switching office for providing communication of a messages with a mobile communication systems, a central controller communicating with the mobile communications system via the communication switching office, the mobile communication system storing on a tangible medium the following software structure for transmitting and receiving data:
- (1) a middleware communications layer sending the data including the satellite message to the transceiver, said middleware communications layer capable of supporting different low level communication codes to support different transceivers;
- (2) a middleware router layer controlling operations of the network controller, said middleware router layer capable of supporting different transceiver protocols;
- (3) a network controller layer outputting the satellite message carrying the user message to the middleware communications layer, said network controller capable of supporting different network functionality; and
- (4) a user interface layer outputting a user message, and receiving user inputs from the graphic user interface, said user interface layer capable of supporting different screen designs and/or information that is displayed to or received from the user without requiring recompilation of the software structure.
 - 27. In a communication system, a communication method comprising:

storing a plurality of message display forms in the mobile communication system, wherein each message display form having a predetermined display format and a form identifier; and

transmitting from a central controller to the mobile communication system a message carrying the message data and the form identifier of a selected one of the message display forms to the communication switching office; and

displaying the message received by the mobile communication system using a selected one of the stored message display forms corresponding to the form identifier in the transmitted message.

28. A communication system comprising:

a network form controller storing a plurality of message forms each having a form identifier and a form definition specifying a predetermined format; and

a user interface controller retrieving a selected one of the form definitions and at least one station address responsive to user inputs, and said user interface controller outputting a user message including the at least one station address and the form identifier corresponding to the selected form definition.

Appendix D

(complete set of pending claims)

1. In a mobile satellite system including a satellite communication switching office having a satellite antenna for providing communication of a satellite message with a mobile communication system via a satellite, a central controller communicating with the mobile communication system via the satellite communication switching office, a communication method comprising:

storing a plurality of message display forms in the mobile communication system, each message display form having a predetermined display format and a form identifier;

generating at the central controller a user message comprising message data;

outputting from the central controller a satellite message carrying the message data and the form identifier of a selected one of the message display forms to the satellite communication switching office;

transmitting the satellite message to the mobile communication system via the satellite; and displaying the satellite message received by the mobile communication system using a selected one of the stored message display forms corresponding to the form identifier in the transmitted satellite message.

2. The method of claim 1, wherein the storing step comprises:

generating a data message having the form identifier and the corresponding display format of at least one of the message display forms;

transmitting the data message as a second satellite message from the satellite communication switching office to the mobile communication system via the satellite; and storing the received data message at the mobile communication system.

13. The method of claim 1, wherein the mobile communication system comprises a PCMCIA slot and application software including a configuration manager, the storing step comprising:

connecting a PCMCIA card to the PCMCIA slot; and downloading the message display forms via the PCMCIA slot.

19. In a mobile satellite system including a satellite communication switching office having a satellite antenna for providing communication of a satellite message with mobile communication systems via a satellite, a central controller communicating with the mobile communication systems via the satellite communication switching office, a communication method comprising:

storing a plurality of message display forms in the mobile communication system, each message display form having a predetermined display format and a form identifier;

storing network identifiers for the central controller and at least one of the mobile communication systems;

generating at a first of the mobile communication systems a user message comprising message data and one of the stored network identifiers;

outputting from the first mobile communication system a satellite message carrying the one network identifier, the message data and the form identifier of a selected one of the message display forms to the satellite communication switching office;

transmitting the satellite message to the satellite communication switching office via the satellite; and

routing the satellite message from the satellite communication switching office to one of the central controller and a second of the mobile communication systems in accordance with the one network identifier.

- 20. The method of claim 19, wherein the storing of message display forms comprises downloading at least a portion of the message display forms from a PCMCIA card connected to the mobile communication switching office.
- 21. The method of claim 19, wherein the storing of message display forms comprises receiving satellite messages from the satellite communication switching office including the form identifier and corresponding predetermined display format for at least a corresponding one of the message display forms.
- 22. The method of claim 19, wherein the storing of network identifiers comprises receiving a satellite message from the satellite communication switching office including at least one of the network identifiers.
- 23. In a mobile satellite system including a satellite communication switching office having a satellite antenna for providing communication of satellite messages with a mobile communication system via a satellite, a central controller communicating with the mobile communication system via the satellite communication switching office, the mobile communication system including a satellite transceiver communicating data carrying a first satellite message to the satellite in response to transceiver control signals, and a graphic user interface providing a display and accepting key inputs from a user, the mobile communication system storing on a tangible medium the following software structure for transmitting and receiving the data:

- (1) a middleware communications layer sending the data including the satellite message to the transceiver, said middleware communications layer capable of supporting different low level communication codes to support different transceivers;
- (2) a middleware router layer controlling operations of the network controller, said middleware router layer capable of supporting different transceiver protocols;
- (3) a network controller layer outputting the satellite message carrying the user message to the middleware communications layer, said network controller layer capable of supporting different network functionality; and
- (4) a user interface layer outputting a user message, and receiving user inputs from the graphic user interface, said user interface layer capable of supporting different screen designs and/or information that is displayed to or received from the user without requiring recompilation of the software structure.
- 24. In a communication system including a communication switching office for providing communication of a message with a mobile communication system, a central controller communicating with the mobile communication system via the communication switching office, a communication method comprising:

storing a plurality of message display forms in the mobile communication system, each message display form having a predetermined display format and a form identifier;

transmitting from the central controller to the mobile communication system a message carrying the message data and the form identifier of a selected one of the message display forms to the communication switching office; and

displaying the message received by the communication system using a selected one of the stored message display forms corresponding to the form identifier in the transmitted message.

25. In a mobile communication system including a communication switching office for providing communication of a messages with a mobile communication systems, a central controller communicating with the mobile communications system via the communication switching office, a communication method comprising:

storing network identifiers for the central controller and at least one of the mobile communication systems;

generating at a first of the mobile communication systems a user message comprising message data and one of the stored network identifiers;

outputting from the first mobile communication system a message carrying the one network identifier and the message data to the communication switching office;

transmitting the message to the communication switching office;

routing the message from the communication switching office to one of the central controller and a second of the mobile communication systems in accordance with the one network identifier.

- 26. In a mobile communication system including a communication switching office for providing communication of a messages with a mobile communication systems, a central controller communicating with the mobile communications system via the communication switching office, the mobile communication system storing on a tangible medium the following software structure for transmitting and receiving data:
- (1) a middleware communications layer sending the data including the satellite message to the transceiver, said middleware communications layer capable of supporting different low level communication codes to support different transceivers;

- (2) a middleware router layer controlling operations of the network controller, said middleware router layer capable of supporting different transceiver protocols;
- (3) a network controller layer outputting the satellite message carrying the user message to the middleware communications layer, said network controller capable of supporting different network functionality; and
- (4) a user interface layer outputting a user message, and receiving user inputs from the graphic user interface, said user interface layer capable of supporting different screen designs and/or information that is displayed to or received from the user without requiring recompilation of the software structure.
- 27. In a communication system, a communication method comprising:

 storing a plurality of message display forms in the mobile communication system,

 wherein each message display form having a predetermined display format and a form identifier;

 and

transmitting from a central controller to the mobile communication system a message carrying the message data and the form identifier of a selected one of the message display forms to the communication switching office; and

displaying the message received by the mobile communication system using a selected one of the stored message display forms corresponding to the form identifier in the transmitted message.

28. A communication system comprising:

a network form controller storing a plurality of message forms each having a form identifier and a form definition specifying a predetermined format; and

a user interface controller retrieving a selected one of the form definitions and at least one station address responsive to user inputs, and said user interface controller outputting a user message including the at least one station address and the form identifier corresponding to the selected form definition.